DEPARTMENT OF HUMAN DEVELOPMENT AND QUANTITATIVE METHODOLOGY

Quantitative Methodology:

Measurement and Statistics (QMMS)

Graduate Student Handbook

Last Updated: August 2025

TABLE OF CONTENTS

WELCOME TO THE PROGRAM! 5

INTRODUCTION 5

HDQM DEPARTMENT ADMINISTRATIVE OVERVIEW 6

HDQM Business Office 6

QMMS: A BRIEF HISTORY 7

QMMS Faculty 7

QMMS ADVISORS 8

Role of Advisor 8

REGISTRATION REQUIREMENTS 9

Full-Time Registration 9

Transfer of Credits 9

More about Registration for Doctoral Students 10

Grade Point Average Requirement 10

QMMS DOCTORAL PROGRAM 11

Course Program Requirements 11

Ph.D. Preliminary Examination 12

Ph.D. Comprehensive Examination 12

Ph.D. Dissertation 14

QMMS MASTER'S PROGRAM 19

Program Requirements: Courses 19

QMMS 5th YEAR BACHELOR'S/MASTER'S PROGRAM 22

QMMS GRADUATE CERTIFICATE 23

MISCELLANEOUS INFORMATION 24

Academic Conduct 24

Accessibility and Disability Services 24

Addressing Student Concerns 24

Annual Review 25

Funding 25

Graduate Research Day 26

Graduation 26

Institutional Research Board (IRB) 27

Leave of Absence 27

Monday Symposium in Measurement and Statistics (MSMS) 27

Student Responsibilities 28

Time Limits 28

STUDENT RESOURCES 28

College of Education Student Services 28

Travel Awards 29

Other Awards, Fellowships, and Scholarship Opportunities 29

Campus Map 29

Dissertation & Thesis Formatting and Style Requirements 29

LINKS TO DEPARTMENTAL, COLLEGE, AND UNIVERSITY RESOURCES 30

Course Descriptions 30

Course Syllabi 30

College of Education Student Services/Resources 30

Graduate Student Forms (Graduate School) 30

Graduate Student Forms (College of Education) 30

Programs and Policies 30

Other Campus Resources 30

APPENDIX A: SCHEMATIC OF QMMS COURSE OFFERINGS AND SEQUENCING 31

APPENDIX B: QMMS DEGREE PROGRAMS AT A GLANCE 32

APPENDIX C: THE ADMISSIONS PROCESS 34

Admission Requirements and Deadlines 36

WELCOME TO THE PROGRAM!

Welcome to Quantitative Methodology: Measurement and Statistics (QMMS)! We are delighted that you selected our program to further your graduate studies. The QMMS Program, the Department of Human Development and Quantitative Methodology (HDQM), the College of Education, and University of Maryland, College Park are widely acclaimed as among the best in the nation!
Through the years, our graduate students have been a vital component of our institution's outstanding reputation, and we are confident that you will continue this tradition. You will have many opportunities to meet and work with full- and part-time doctoral and master's students in QMMS, QMMS faculty members, and administrative staff in HDQM who will be your colleagues and "go-to" people while you are with us.

Adjusting to a new environment can be a challenging task and so we strive to maintain a friendly and helpful environment within the program and department (and university, although we have less control over the campus environment). Hopefully, this will make it easy for you to meet other members of the community and immerse yourself in this special professional culture. We encourage you to get to know the people who can assist you in meeting your academic goals – faculty, advanced students in the program, and administrative support staff. You will find that a considerable portion of what you learn here will be the result of interacting with your fellow graduate students.

The path to your M.S. or Ph.D. degree may at times seem like a maze of rules and requirements, and you may wonder if you are on the right track. The information in this handbook is intended to be a valuable resource for you. Please take time to read it and keep it as a reference guide. And always feel free to ask questions!

INTRODUCTION

This handbook describes the major milestones, program regulations, and requirements that students will encounter as they complete degree (and certificate) programs in QMMS. Planning of all phases of your program should be done in consultation with your academic advisor (more on advising below).

Policy statements described herein are subject to change and thus this is a living document, meant to change as policies change or are modified. Students are advised to consult department, college, and graduate school websites and publications for detailed and up-to-date information. Copies of forms required to complete the procedures described in this Handbook may be obtained from the HDQM Department, the College of Education, and/or the Graduate School websites (see below for links to these documents).

HDQM DEPARTMENT ADMINISTRATIVE OVERVIEW

Graduate education at UMD is governed through a partnership between the Graduate School and the colleges/schools within the university. Both are responsible for the maintenance and development of high-quality graduate programs. The HDQM Department is governed by a chair and each graduate program is coordinated by a program director and further supported by a director of graduate studies (DGS). Currently, here is the structure in HDQM:

HDQM Chair: Laura Stapleton, Ph.D.
QMMS Program Director: Greg Hancock, Ph.D.
QMMS DGS: Tracy Sweet, Ph.D.
Human Development (HD) Program Director: Geetha Ramani, Ph.D.
HD DGS: Lucas Butler, Ph.D.

The program director and DGS work with the chair to guide and improve graduate education for students in their respective programs. The QMMS program director serves a variety of leadership and organization functions at the program level, including oversight of procedures for admissions, recruitment, fellowship allocation, curriculum, course offerings, teaching assignments, faculty mentorship, and liaising with the HDQM department chair on program and departmental matters. The QMMS DGS is responsible for curriculum and degree matters, coordinates graduate program development efforts, and monitors graduate student progress.

HDQM Business Office

The HDQM business office is located in room 3304 of the Benjamin Building. The office provides support for faculty, staff, and students of the department. Services include, but are not limited to, procurement, travel, grant support, room reservations, technical service requests, and the team serves as the department's liaison to other departments on campus. The business office can be reached at hdqm-operation@umd.edu. Members making up the HDQM business office staff are important community members that keep YOU and the department running smoothly.

- Sherri Shelton, Director of Administrative Services
- Jessica Chew, Graduate Program Coordinator
- Jennie Lee-Kim, Director of Academic Services
- Ellen Hong, Program Business Manager
- Joe Johnston, Program Management Specialist
- Cornelia Snowden, HR Coordinator

QMMS: A BRIEF HISTORY

The College of Education has long provided instruction in quantitative research methods. QMMS was established as its own department around 1972 (we're a little fuzzy on the exact year) and continued on in this administrative structure over the next 38+ years. In 2011, the College of Education reorganized and the QMMS department became one of three program areas within the then, newly formed, HDQM department. Throughout its history, QMMS has engaged in the dual roles of (1) professional training and (2) service to the college, and broader University of Maryland academic community.

In its first role, QMMS has provided training at the master's and doctoral levels for students planning to pursue careers in quantitative areas related to applied statistics, measurement, and evaluation. The graduate programs in QMMS have both full- and part-time students. The number of full-time faculty in QMMS has fluctuated from six to eight with a budgeted complement of seven at present (eight including Laura Stapleton who is currently an Associate Dean of Research, Innovation, and Partnerships at the college level). For a more detailed history of QMMS, please click here.

QMMS Faculty

Current

Gregory R. Hancock, Ph.D., Professor (University of Washington) Jeffrey R. Harring, Ph.D., Professor (University of Minnesota) Hong Jiao, Ph.D., Professor (Florida State University)
Yang Liu, Ph.D., Associate Professor (University of North Carolina, Chapel Hill) Laura Stapleton, Ph.D., Professor (University of Maryland, College Park)
Peter Steiner, Ph.D., Professor (University of Vienna, Austria)
Tracy Sweet, Ph.D., Associate Professor (Carnegie Mellon University)
Ji Seung Yang, Ph.D., Associate Professor (University of California, Los Angeles

Emeritus
C. Mitchell Dayton (retired 2010)
Robert Lissitz (retired 2015)
George Macready (retired 2015)
Robert Mislevy (retired 2011)
William Schafer (retired 2008)

Other QMMS program information—such as currently enrolled graduate students, QMMS-sponsored workshops, a listing and description of QMMS courses, and many other useful tidbits of information—can be found by perusing the QMMS website at https://education.umd.edu/measurement-statistics-evaluation-program. Click on menu headers to navigate the site.

QMMS ADVISORS

All graduate students are initially assigned an QMMS advisor upon acceptance and enrollment in an QMMS degree or certificate program. This initial assignment is made by the program director whose decision is guided by several factors, including but not limited to whether newly enrolled graduate students had identified on their application any faculty member(s) with whom they would like to work as well as numbers of graduate students already assigned to each faculty member. It should be noted that faculty advisors can be changed during a student's degree program. Unlike many quantitative methods programs at other universities around the country, the assignment of an QMMS advisor is not connected to funding. Consequently, graduate students often work across content domains of faculty during their program of study usually deciding on a "research advisor" (or co-advisors) to guide and direct a student's dissertation. If this QMMS faculty member is not the originally assigned advisor, a student must officially change advisors with the Graduate School. Requests for change of advisor must be made in writing to the departmental graduate director. A form is available in the department for making this request from the College of Education Student Services office (webpage). For a change of advisor to be approved, the signatures of both the present and proposed advisors must be obtained.

Role of Advisor

QMMS advisors are central to the success of graduate students seeking an M.S. or Ph.D. degree or graduate certificate. They provide insight on the content of study and the process of graduate school itself. They can often—but not always—provide guidance regarding the policies and procedures that are outlined in the various materials and policy documents for the program, department, college, and university.

Graduate students should confer with their advisors at relevant milestones. Advisors are often required to approve student decisions with their signature (e.g., examination committees), but there are many decisions that advisors are privy to only if students *meet and discuss* those decisions with their advisors. For example, advisors should formally approve course registration (although there is no requirement to do so) or many of the activities associated with the informal curriculum (e.g., attending or presenting at conferences). However, successful graduate students communicate with their advisors and solicit relevant guidance through discussion so that they can help tailor program experiences to meet the student's professional goals and aspirations.

QMMS advisors are regarded as some of the best around. However, students should recognize that there are a wide variety of advising styles such that some advisors expect independence while others expect more dependence. Students can solicit advice from their advisors, but the student is ultimately responsible for their success in graduate school.

REGISTRATION REQUIREMENTS

Students must register every semester (excluding winter and summer terms) to maintain active status as a graduate student. A student is automatically withdrawn as a graduate student if he or she does not register for even one semester. As a result, your graduate school records are deactivated. Inactive students may not register for courses, take examinations, submit petition forms, file for graduation, or otherwise participate in the university community as graduate school students. Those who wish to resume graduate work must apply for readmission to the UMD Graduate School and their degree program. Students who are re-admitted will be held to course/credit requirements current at the time of readmission. If readmitted, you must register in the Graduate School for the semester of readmission to regain your active status. More information can be found here: https://academiccatalog.umd.edu/graduate/policies/registration-policies/

Full-Time Registration

The Graduate School uses a unit system to determine full-time or part-time student status. Please note that graduate units are different from credit hours. The manner in which the number of graduate units per credit hour is calculated can be found here: https://academiccatalog.umd.edu/graduate/policies/registration-policies/

Full-time graduate students must register at the 600 or 700 level for a minimum of 4 credits for full time status. Many students are required to maintain full-time status (e.g., if you hold a graduate assistantship, are on a student visa, or have a scholarship that requires it). Full time tuition covers a maximum of **10 credits per semester** and students are charged for each credit beyond the maximum. **Note, international students on F-1 and J-1 student visas must maintain full-time status throughout each semester according to Federal regulations governing F-1 and J-1 students. Please contact an advisor in OIS at 301-314-7744 if you have any questions concerning full-time status.**

Registration and schedule of courses and other relevant information related to scheduling can be found here: https://academiccatalog.umd.edu/graduate/policies/registration-policies/#text

Transfer of Credits

Coursework from other institutions might be able to be used to meet QMMS degree requirements; however, talk to your advisor and DGS to be see if this is a possibility. An internal petition may be required.
To be eligible, the work to be transferred from other institutions must be graduate-level (post-baccalaureate), taken for graduate credit after the award of the undergraduate degree, and taught by faculty members authorized to teach graduate coursework. In addition, courses must have been taken as an enrolled, graduate-degree-seeking student and must appear on official graduate school transcripts of the institutions.

More about Registration for Doctoral Students

The University requires that doctoral students register each semester, excluding summer sessions, until the degree is awarded. When coursework has been completed, but the student has not advanced to candidacy, they may register for 1-8 credits of QMMS898, "Pre-Candidacy Research" with the advisor's permission. Each credit of this course carries 18 graduate units, used to determine full or part-time status. Doctoral candidates who have completed both the required course work and have advanced to candidacy (completed *all but their dissertation*, or ABD), are **automatically registered** by the University each fall and spring semester for 6 credits of QMMS899, "Doctoral Dissertation Research." Summer registration is required if the student is using the facilities of the university or graduating. Doctoral students graduating in the summer must register for a minimum of 1 credit of QMMS899 in one of the summer sessions. Failure to comply with the requirement to maintain continuous registration will be taken as evidence that the student has terminated participation in the doctoral program. A new application for admission, with consequent reevaluation of the student's performance, will be required of a student wishing to resume a graduate program terminated under this regulation.

Grade Point Average Requirement

The Graduate School requires all graduate students to maintain a grade point average (GPA) of at least 3.0 in the graduate program in which they are enrolled. A student whose cumulative grade point average falls below a "B" (3.0) upon or after the completion of 9-credit hours of graduate level courses will be automatically placed on academic probation by the Graduate School for the following semester. A student whose cumulative grade point average falls below a "B" (3.0) for a second successive semester of enrollment for courses may, upon the recommendation of her or his graduate chair and with the consent of the Graduate School, be granted a final opportunity to correct the scholastic and/or academic deficiency in the next semester of enrollment for courses. A student whose cumulative grade point average falls below a "B" (3.0) average for three consecutive semesters of enrollment will not be permitted to re-enroll and will be required to withdraw from the university. A student whose cumulative grade point average is below a "B" (3.0) will not be recommended for a degree.

QMMS requires that no grade below a B- in a course can be used toward the degree requirement.

QMMS DOCTORAL PROGRAM

QMMS offers the Doctor of Philosophy (Ph.D.) degree within the HDQM department. The Ph.D. degree program is research-oriented with the primary objective of training graduate students for scholarly research activities directed mainly toward the generation and dissemination of new knowledge in quantitative methodology. Additionally, the doctoral program is designed to qualify individuals to teach courses at the university level in applied measurement, statistics, and evaluation, to provide leadership in the conduct of research studies, and to serve as applied statistics, measurement, or evaluation specialists in school systems, industry, and government.

Course Program Requirements

The QMMS Ph.D. degree program requires students to complete a **minimum of 66 credits**, which includes 12 credits of QMMS899 and at least 21 credits of elective courses. Courses must be selected in consultation with the student's advisor. The course offerings along with their credits (in parentheses) can be found below and a more complete description of the courses can be found by clicking here. A minimum of 30 credit hours (including QMMS 899) must be taken following admission and must be taken in the Department of HDQM (i.e., courses with the designation QMMS on Testudo.umd.edu). Students already having completed a Master's degree earned outside the University (domestic or international accredited institution) may request that a portion up to 9 credit hours of this coursework be included in the 66+ hours required for the doctoral degree in QMMS. Students who matriculate from the QMMS Master's degree program and transition into the QMMS Ph.D. program may have already taken several QMMS courses, which will not need to be repeated although the 30 credit minimum still applies for these students. All graduate students are required to have advisor approval for course selections prior to registration each semester. **Also, your faculty advisor may require courses beyond those specified in this document**.

Courses within a program of study are selected from QMMS offerings as well as those of other programs/departments of the university. A program of study for a student will be structured to consider the background and future aims of the individual. There is a common, required set of courses comprised of:

QMMS 623 Applied Measurement: Issues and Practices (3)
QMMS 626 Instrumentation (3)
QMMS 646 General Linear Models I (3)
QMMS 647 Causal Inference and Evaluation Methods (3)
QMMS 651 General Linear Models II (3)
QMMS 655 Introduction to Multilevel Modeling (3)
QMMS 657 Exploratory Latent and Composite Variable Methods (3)
QMMS 722 Structural Modeling (3)
QMMS 724 Modern Measurement Theory (3)
QMMS 779 Mathematical Foundations and Simulation Techniques (3)
QMMS 787 Bayesian Inference and Analysis (3)
QMMS 899 Doctoral Dissertation Research (12)
Electives (21)

Ph.D. Preliminary Examination

All students admitted to the QMMS doctoral program will start with a research project during their first semester. The main goals of the research project are: (a) to become acquainted with research and research-related activities (e.g., conducting literature reviews, formulating research questions, designing and implementing simulations, analyzing data, writing abstracts and manuscripts, and presenting, discussing, and defending ideas and results), (b) to apply basic statistics and measurement skills, and (c) to gain hands-on training in more advanced methods and skills while working on the project. The research focus of the pre-candidacy project is designed to prepare students for the comprehensive examination, the Ph.D. dissertation, and ultimately for a career in industry, research institutions, or academia.

The pre-candidacy research project typically lasts between one and two years. The schedule and requirements for the pre-candidacy research are as follows:

(1) *Choice of Research Topic*. Within the first semester, first-year Ph.D. students, in consultation with their academic advisor, choose a topic and research question for their project.

(2) *1st Year Research Day Presentation*. For the Graduate Research Day in the spring of the first year, students submit an abstract and present their research project proposal. The QMMS exam committee will provide written feedback on the abstract and presentation.

(3) *2nd Year Research Day Presentation*. For the Graduate Research Day in the spring of the second year, students submit a longer structured abstract and present the results of their research project. The second-year Research Day presentation then formally concludes the pre-candidacy research project. The exam committee will provide written feedback on the abstract and presentation.

Ph.D. Comprehensive Examination

All doctoral students must take the doctoral comprehensive examination that is described below—and formal outlines of the procedures for both examinations can be found on the QMMS Student Space website on ELMS (the University of Maryland course delivery system).

There are 4 components to the Ph.D. Comprehensive Examination: (1) personal statement, (2) curriculum vitae (CV), (3) research topic and reading list, and (4) simulation design proposal. In conjunction with the advisor's approval, each student will submit these materials to the QMMS Examination Committee Chair who will then circulate these to other committee members for feedback. In this stage of the process, there are two possible outcomes:

- The committee approves the materials and designates a due date, to be no earlier than 6 weeks in the future; or,
- The committee makes suggestions and asks the student to revise their materials for resubmission.

The committee will also set a due date for the resubmission, based on the suggestions.
By the due date specified, the student will electronically submit the written exam to the exam

committee chair, which will include the following complete documents (See Section 3 for descriptions and requirements for each component.)

- A literature review
- A simulation study

After submitting the written components of the exam, the three voting-members of the exam committee will vote on whether the written components meet the criteria provided as itemized lists in Section 3 of the document. If all of the voting-members of the committee vote to proceed, the oral defense will be scheduled. Students must successfully pass both the written and oral defense components of the examination to receive an overall pass. If a student does not pass, the committee will determine whether the entire exam must be repeated or the oral exam. While the committee may provide general comments, they will not provide specific feedback. The expectation is that students will put forth their best effort during the exam period. A student may take the PhD Comprehensive Exam at most two times. Failure to proceed to the oral defense after submitting the written exam counts as a failure of both portions of the exam (the student has only one additional retake).

Upon successful complete of the PhD Comprehensive Examination, the student's advisor will send a memorandum on letterhead confirming that the student has successfully advanced to candidacy to the department's graduate program coordinator along with the *Advanced to Candidacy* form, which should be completed by the student and approved by the DGS and student's advisor. The advanced to candidacy form can be found at: https://gradschool.umd.edu/sites/gradschool.umd.edu/files/uploads/application_for_admission_to_candidacy.pdf

Ph.D. Dissertation

QMMS doctoral students are required to complete a dissertation of original work. Students will work with their advisor to carve out a research project(s) that meets the scope, creativity, and originality of a dissertation. With this short preamble, what constitutes a dissertation in QMMS?

QMMS doctoral students can choose between two approved formats for their dissertation, in close consultation and planning with their advisor.

Option #1 (Traditional Dissertation Format)
This option constitutes a more traditional format that involves independent research on a topic agreed upon by the student and academic advisor. QMMS dissertations in this format are regularly written in five-to-six chapters. A conventional outline of chapter might include (1) an overview and/or introduction, (2) a review of the relevant literature, (3) methodology—in many instances this may consist of executing a Monte Carlo simulation or may involve software development/computational coding, (4) a summary of results, (5) an optional empirical example, and (6) conclusions/discussion/future directions.

Under Option #1, the doctoral candidate will provide his/her/their committee with a dissertation proposal typically consisting of (1) an introduction to the project often comprising of the contribution of the work to the literature, (2) a review of the relevant literature, and (3) the proposed methodology (i.e., Monte Carlo simulation design which would consist of a rationale of the design factors and pertinent outcome variables).

Option #2 (Multiple-Paper Format)
Students choosing this option would be responsible for authoring at least two papers as the first author. There should be a coherent, cohesive general theme to the two papers that demonstrate a line of thinking or inquiry. The dissertation then consists of (1) an introduction describing the overarching theme, (2) the set of two (or more) papers of publishable quality, and (3) and a general discussion considering the papers as a whole including limitations and future directions of the line of inquiry.

Under Option #2, the doctoral candidate will provide his/her/their committee with a dissertation proposal that includes (1) an introductory discussion outlining the overarching theme of the dissertation, (2) one completed manuscript, which may already be submitted or accepted for publication, and (3) a draft of a second paper that is sufficiently developed to allow committee members to assess the general theme and methodological contribution (it may or may not include results). If the dissertation comprises more than two papers, the proposal should include two complete or nearly completed manuscripts and a draft of the remaining paper(s).

Dissertation Committee

The dissertation committee evaluates the dissertation proposal and completed document and participates in the oral examination of the candidate. The dissertation committee is comprised of at least five faculty members: 4 from the QMMS program and 1 member who is tenured, a member of the graduate faculty, and outside of the HDQM department (this outside person acts as the Dean's representative and is a voting member). In some cases, a student may want as a committee member someone who does not have an appointment at UMD (e.g., faculty from a different university). Before serving on a committee, such an individual must be given a fixed-term appointment to the Graduate Faculty—contact the QMMS DGS and the department graduate program coordinator to make this request. This appointment is voted on by the department and approved by the Graduate School and usually takes some time to get approved. Therefore, the process of forming a dissertation committee should be done well in advance of the dissertation proposal. The dissertation committee is typically chaired by the student's primary research advisor (i.e., a tenure-track QMMS faculty member).

Dissertation Proposal Defense

The Dissertation proposal defense should not be scheduled until after the student has successfully completed the doctoral comprehensive examination. The dissertation committee should receive a copy of the dissertation proposal within two weeks (or before a deadline determined by the committee) before the proposal date.

The proposal meeting is scheduled for approximately 2 hours during which the student typically offers a brief (~10 minute) presentation. Following this presentation of the dissertation proposal, the committee will offer suggestions, comments, and inquiries designed to help maximize the potential for the success of the project. The intent is to ensure that the research is sufficiently original, methodologically sound, adequately fills a niche in the literature and that the procedures planned are feasible and appropriate. The student can expect this to be a rigorous analysis of the project including its theoretical basis and its methodology. In many circumstances, data collection or execution of a simulation should not begin until after the dissertation proposal meeting.

Students can defend their dissertation proposal to the dissertation committee at any point during the regular academic year (i.e., not during holidays or summer; however, the academic year does include days when finals are being administered).

Dissertation Defense

When the student and advisor mutually have agreed that a version of the dissertation is ready for evaluation by the committee, the dissertation defense is scheduled. The committee should receive a copy of the dissertation document two weeks prior to the scheduled defense (or by a deadline agreed by the committee members). Dissertation defense meetings must be scheduled during the academic year [i.e., not during holidays or summer (unless the committee agrees to this timing); however, the academic year does include days when finals are being administered].

The defense typically lasts about 2 hours and starts with the student offering a (~20-30 minute) presentation of the research questions, methodology, findings, conclusions, and future directions. Should students want to open the presentation part of their dissertation defense to others (e.g., friends, family), they are welcome to do that; students should discuss this with their primary research advisor. After the presentation portion, non-committee members would be given the opportunity to ask questions and would then be asked to leave so that the committee members and student can have their discussion.

The discussion and deliberation part of the defense is typically focused on such issues as whether additional analyses are needed, whether results have been interpreted fairly, and whether conclusions drawn are appropriate, as well as "big picture" items, implications to practitioners or methodologists, and future research directions. The dissertation process, with the attentive input of committee members, tends to result in very thoughtfully conceived and carefully executed research. The finished product is usually a source of considerable pride for both the student and the committee members. We hope that most students will quickly prepare their dissertations for publication. To that end, **a requirement of the defense is that the student must present a manuscript-ready document that can be submitted to a journal. This manuscript is often a distillation of the thesis and is approximately 30-40 double-spaced pages**.

At the completion of the dissertation defense, the committee will determine whether the dissertation is acceptable and/or whether it requires revisions. The decision to pass the dissertation defense is based on the committee's determination that the student has demonstrated all of the competencies of someone at this stage of their career. The potential outcomes of the defense are:

a) To accept the dissertation/thesis without any recommended changes and sign the Report of the Examining Committee.

b) To accept the dissertation/thesis with recommendations for changes, and, except for the chair, sign the Report of the Examining Committee. The chair will check the dissertation/thesis and, upon his/her approval, sign the Report of the Examining Committee.

c) To recommend revisions of the dissertation/thesis and not sign the Report of the Examining Committee until the student has made the changes and submitted the revised dissertation/thesis for the Examining Committee's approval. The Examining Committee members sign the Report of the Examining Committee if they approve of the revised dissertation/thesis.

d) To recommend revisions and convene a second meeting the Examining Committee to review the and complete the student's defense.

e) To rule the dissertation (including the defense) or the thesis (including its examination) unsatisfactory. In that circumstance, the student fails. In cases of failure, the Examining Committee must specify in detail and in writing the nature of the deficiencies in the dissertation/thesis and/or oral performance that led to the failure. This statement is to be submitted to the program's Director of Graduate Studies, the Dean of the Graduate School and the student.

Forms and Paperwork

There are several requirements of the QMMS doctoral degree: (1) students must pass with a B-grade or better all required courses for the degree (and maintain a B average), (2) students must successfully pass the Ph.D. Preliminary AND Ph.D. Comprehensive Examinations, and (3) students must write and successfully defend a dissertation. Once all requirements of the Ph.D. degree have been successfully met, a student can apply to graduate. The following is a checklist of the steps need to graduate.

Ph.D. degree graduation requirements:

*****Apply for graduation by the deadline of each semester.**

1. Successfully propose- should be done semester prior to defense or early in the semester the student plans to graduate (proposal form should be taken to proposal meeting to obtain three signatures by the committee. The proposal form can be found at: https://education.umd.edu/academics/departments/hdqm/resources-forms-and- handbooks/student-resources

2. Schedule your defense. Students should check with graduate program coordinator to ensure they are eligible to defend.

3. Nomination of committee form should be submitted six weeks prior to defense found at:https://gradschool.umd.edu/sites/gradschool.umd.edu/files/uploads/Forms/umd_nomination_of_thesis_or_dissertation_committee_01-31-2022.pdf
*****To request a special member, the student must provide the DGS with the members CV. The DGS will work with the coordinator and Phr coordinator to obtain approval. Then, the nomination form can be submitted once the special member has been approved to serve on a committee.**
4. To schedule a room for the defense meeting, please submit a request via the portal: https://education.umd.edu/academics/departments/hdqm/resources-forms-and-handbooks/department-forms

5. Once the *Nomination of Committee* form is approved, students will be contacted by the graduate program coordinator.

6. The graduate program coordinator will announce the students defense, two weeks prior. Please complete the oral announcement form and submit to the graduate program coordinator found at https://education.umd.edu/student-resources/student- services/graduate-studies-student-services-office/graduate-studies-forms#oral

7. After the student has successfully defended and made the required revisions, the advisor will submit the defense forms to the graduate program coordinator.

8. Students will need to upload his/her dissertation to *Proquest* in order to be officially cleared to graduate. A Proquest form and instructions (second page) can be found at: https://gradschool.umd.edu/sites/gradschool.umd.edu/files/uploads/thesis_and_dissertation_electronic_publication_form.pdf

As a final step, the student should check in with the graduate program coordinator to check that all requirements for graduation, especially paperwork, has been successfully submitted and recorded.

QMMS MASTER'S PROGRAM

QMMS offers the Master of Science (M.S.) degree within the HDQM department. The M.S. degree program is largely a course-taking degree and is designed to provide balanced intermediate level graduate training in quantitative methods for students preparing for a variety of positions in government, educational institutions, and private industry. Proximity to Washington, D.C. provides opportunities for students to engage in a variety of academic and professional experiences.

Program Requirements: Courses

The QMMS Master's Program requires a minimum of **30 credits** in courses acceptable for credit toward a graduate degree. At least 18 must be selected from courses numbered 600 or above, combining content from statistics, measurement, evaluation, and related fields outside of the Department (a maximum of 6 outside credits). Courses within the program of study are selected from QMMS offerings as well as from other programs/departments of the university. A program for a student will be structured to consider the background and future aims of the individual. The Graduate School allows transfer of up to six credits of appropriate prior graduate work. There is a common, required set of courses comprised of:

QMMS 623 Applied Measurement: Issues and Practices (3)
QMMS 646 General Linear Models I (3)
QMMS 647 Causal Inference and Evaluation Methods (3)
QMMS 651 General Linear Models II (3)
QMMS 655 Introduction to Multilevel Modeling (3)
QMMS 657 Exploratory Latent and Composite Variable Methods (3)
QMMS 724 Modern Measurement Theory (3)
Electives (9)

A B- grade or better in all required courses for the degree along with a B average overall is required for good academic standing.

Program Requirements: Master's Comprehensive Exam

The Master's Comprehensive Examination based on the first four courses constituting the core (646, 651, 623, 647) is a degree requirement – these are shown in bold above. The examination is aligned with the core curriculum of the QMMS program—content that QMMS faculty regard as essential. In addition, the examination provides students graduating with a master's degree from QMMS the opportunity to (a) demonstrate their knowledge in terms of basic statistical and assessment procedures and methods, and to (b) exhibit their data analytic capabilities that have been accrued from taking the core courses. The examination evaluates both objectives by testing both declarative and procedural knowledge, respectively. Passing the examination, as defined below, is mandatory to fulfill the degree requirements for Master's degree, and students have up to 2 attempts to pass the examination. Failure to pass this assessment leads to termination from the QMMS program.

Master's Comprehensive Exam Implementation

The MS comprehensive examination has two components: (1) a timed in-class ***declarative knowledge*** portion, and (2) a timed take-home ***procedural knowledge*** portion. The exam is typically administered once per semester, usually within the first few weeks. The exam consists of 4 questions, one each from the four core courses: (1) QMMS 646: General Linear Models I; (2) QMMS 651: General Linear Models II; (3) QMMS 623: Applied Measurement: Issues and Practices; and (4) QMMS 647: Causal Inference and Evaluation Methods. Each question may have multiple parts and/or sub-questions.

The exam questions are written using a posted list of topics corresponding to each core course. Three faculty members sitting on the exam committee submit questions comprising the pool of potential final questions. Finalizing questions is done iteratively through peer review. Exam content is regularly refined by checking with recent instructors of the core courses, revision if necessary, and checking for grammatical errors are standard procedural activities.

Master's Comprehensive Exam Evaluation

Students are required to demonstrate minimum competence for each of the two components (declarative and procedural) comprising the exam. Assessment of student performance is conducted by the Examination Committee of the QMMS program. All three members of the examination committee will holistically evaluate each exam component for each student with a two-thirds majority determining the outcome (pass or fail). The in-class declarative knowledge examination and the take-home procedural examination will be evaluated separately, but both components must receive a majority passing grade for the student to have successfully passed the comprehensive examination.

If a student fails one or both of the components, they will be allowed a single retake of the failed section(s) to successfully pass the examination. This is typically done the next semester. Should the student fail during the second attempt, the student will be terminated from the QMMS graduate program. More information regarding scoring of the examination, content topics, and other procedures regarding the exam can be found on the QMMS Student Space website on ELMS (the University of Maryland course delivery system).

Program Requirements: Master's Thesis or Paper

Both thesis and non-thesis options are available in the M.S. program although the majority of students opt for the non-thesis option. The thesis option requires that the Master's degree student complete a thesis in consultation with their advisor. The student and advisor select a three-member committee. The committee is comprised of a minimum of three voting members of the graduate faculty including two full members. The chair of the committee should be the student's advisor and a full member of the graduate faculty. Faculty who leave UMD (except Emeriti) are graduate faculty members for one year and are then nominated as special members. Students are evaluated on whether they can successfully defend their rationales, choices, and interpretations of their research project. The committee form—committee members are required to be approved **prior** to exam—can be found at: https://gradschool.umd.edu/sites/default/files/2022-11/umd_nomination_of_thesis_or_dissertation_committee_202205.pdf

The non-thesis option is complete in consultation with a faculty advisor. Students must write a manuscript-length and quality paper addressing a methodological topic or performing an advanced real data analysis with empirical data. The choice of topics should be made in consultation with the student's advisor. Importantly, the student's advisor does not have to be the "lead" faculty overseeing the final paper. The form that a student's advisor submits to approve the non-thesis paper can be found here: https://education.umd.edu/sites/default/files/uploads/inline-files/Seminar%20Paper%20Title%20Page_Revised.2025Final.pdf

Other Requirements

Once all requirements of the Master's degree has been successfully met, a student can apply to graduate. There are several requirements for the QMMS master's degree: (1) course completion with a B- and B average; (2) a passing score on the Master's Comprehensive Examination; and (3) thesis or non-thesis paper.

Master's graduation forms:

- MAP form: https://gradschool.umd.edu/sites/default/files/2022-11/apf_masters_and_certificates_202205.pdf
- The Master's Comprehensive Examination completion form (signifying the date that the student passed the exam)
- U-achieve audit
- Capstone paper title/cover page approved and signed by the advisor and faculty member overseeing the paper (they might be the same person)

As a final step, the student should contact the HDQM Graduate Program Coordinator, to check that all requirements for graduation, especially paperwork, has been successfully submitted and recorded.

All coursework applied toward completion of the degree must be completed in a five-year period.

QMMS 5th YEAR BACHELOR'S/MASTER'S PROGRAM

The QMMS program offers a 5th year M.S. degree program for undergraduates interested in quantitative methods. This allows highly motivated undergraduate students the chance to develop their skills in quantitative methods and complete both the bachelor's and master's degrees in (typically) 5 years. This degree prepares students for careers that include statistical data analysis, developing survey and testing instruments, designing research studies, performing quantitative analysis, evaluating educational programs, psychometric analysis of assessment results, conducting marketing studies, and conducting surveys.

Almost any undergraduate major would be appropriate for this program, including (but not limited to) psychology, sociology, mathematics, statistics, computer science, communications, business, public health, and economics. The critical quality that a student needs to bring to the department is strong quantitative ability. Ours is a profession that trains at the graduate level, and the specific undergraduate major is not a critical factor. Fields involving the application of modern quantitative research techniques provide an outlet for those trained in this program.

While an undergraduate, students can take up to three of the following four courses: QMMS646, QMMS651, QMMS623, QMMS647. These 9 credits would count toward both the undergraduate and graduate degree program. As a consequence, students are strongly encouraged to coordinate with their home program/department for their bachelor's degree and seek the advice of the HDQM graduate program coordinator early on in this process to ensure minimal disruption. Some students may even be able to take additional courses if the graduate school approves their transfer to the M.S. level. Students would also need to formally apply to the Master's program in the fall of their senior year for a seamless transition from undergraduate to graduate studies. Note that acceptance into the QMMS master's program is not assured; other factors, such as GRE scores, must also be considered in admission decisions. Please contact the QMMS DGS or QMMS program director for more information on the enrollment process. The Graduate School policy can be found at: https://education.umd.edu/academics/programs/undergraduate/fifth-year-bs-ms- program

QMMS GRADUATE CERTIFICATE

Students who are enrolled in a doctoral program at the University of Maryland may apply to enter the QMMS Graduate Certificate Program. This program allows students to obtain skills and knowledge to have a quantitative specialization that they may use with their content area of interest. Certification will appear on the student's official UMD transcript. The certificate requires completion of 21 credits, including the following 4 common core courses:

QMMS 623 Applied Measurement: Issues and Practices (3)
QMMS 646 General Linear Models I (3)
QMMS 647 Causal Inference and Evaluation Methods (3)
QMMS 651 General Linear Models II (3)

The certificate does not require any examinations or additional work outside of the coursework. All courses must be QMMS courses although substitutions may be allowed in certain circumstances.

MISCELLANEOUS INFORMATION

Academic Conduct

The university's "Code of Student Conduct" specifically prohibits "all forms of academic dishonesty, including cheating, fabrication, facilitating academic dishonesty and plagiarism." It is important to note that the university interprets the submission of the same paper, or substantially the same paper, to more than one instructor to be a violation of this code. Students found guilty of such offenses risk expulsion from the university. Graduate School policy can be found here: https://academiccatalog.umd.edu/graduate/policies/registration-policies/#text. Also, please examine the policies and links about academic integrity at: https://studentconduct.umd.edu/what-academic-misconduct

Accessibility and Disability Services

The University of Maryland is legally obligated to provide appropriate accommodations for students with disabilities (see disabilities services webpage at: https://www.counseling.umd.edu/ads/). The campus's Accessibility and Disability Service (ADS) office works with students and faculty members to address a variety of issues ranging from test anxiety to physical and psychological disabilities. Note that to receive accommodations, students must first have their disabilities documented by ADS. The office then prepares an Accommodation Letter for course instructors regarding needed accommodations. Students are responsible for presenting this letter to their instructors by the end of the drop/add period.

Services for students in various forms of distress are offered by the Counseling Center and the Behavioral Health Services in the Health Center. During evenings and weekends, the student peer-counseling hotline (4-HELP or 4-4357) is available.

Addressing Student Concerns

Occasionally, a student may have a concern about a course instructor, his or her advisor, or other faculty member. There are a number of resources and avenues available to the student to voice a complaint and have thoughtful follow-up by the HDQM/UMD community. As we are all adults, perhaps the best, most straightforward course of action is to bring your concern to that individual and engage in a discussion. If you have done this without resolution or if you are uncomfortable taking this step, then there are many other faculty in positions who can help. The QMMS DGS or program director can be appropriate people to hear your concerns. The HDQM chair is a person at the next level up in the administrative hierarchy to whom a concern might be voiced. If the concern is about one of these individuals, the UMD campus has an Ombuds Office available to all students with questions or concerns related to their graduate experience. The Ombuds office provides confidential and informal assistance in resolving conflicts and promotes fair and equitable treatment within the university.

Annual Review

QMMS faculty reviews the progress of all graduate students on an annual basis. Students are expected to submit requested materials, typically in late March/early April for annual review by the DGS. Written feedback is provided to students with unsatisfactory performance on one or more of the program requirements (e.g., low GPA, insufficient progress toward degree, behavioral issues). Unsatisfactory performance is grounds for termination.
At a minimum, the QMMS program requires that students maintain a satisfactory GPA (3.0 for all graduate students) and timely completion of benchmarks (e.g., examinations, research, dissertation proposal). In addition, QMMS requires a grade of B- or better for all classes to be counted toward an QMMS degree.

Funding

QMMS offers funding packages to the majority of doctoral students upon matriculation into the program and attempts to fund or find funding for master's students as needed or as monies become available. Graduate students fund their education through a variety of ways. The most common form of support is through research and teaching assistantships; these positions usually provide a salary and may also provide a tuition reduction/remission and health insurance. Every year, research and teaching assistantships are assigned based foremost on the needs of the QMMS program while keeping in mind a student's professional goals. For example, those doctoral students who envision pursuing a career in academia may be assigned as a teaching assistant in the QMMS451 Teacher/Mentor program with the primary goal of teaching an introductory undergraduate course. QMMS faculty work hard to put graduate students in positions that will provide opportunities to gain real-world experience engaging in professional activities that students will likely find themselves taking on in positions after graduation.

The QMMS program also has affiliations with a variety of agencies that wish to fund assistantships for our students. Some of the agencies and centers on and off campus in which QMMS students have been placed include but are not limited to:

- Maryland Assessment Research Center
- Center for Applied Linguistics
- Association of American Medical Colleges
- U.S. Drug and Food Administration
- Institutional, Research, Planning and Assessment (IRPA) at UMD
- Maryland Longitudinal Data System Center
- National Foreign Language Center

Each year around January/February, the program director and/or DGS will send out a call to all graduate students asking whether or not they will need funding the next academic year. At that point, each student will have a chance to respond and weigh in on the role and funding mechanism.

In addition to research and teaching assistantships, fellowships are available through the university and other organizations (such as professional and fraternal organizations). University

fellowships are available at https://gradschool.umd.edu/funding/student-fellowships-awards. Note that some of these require nominations by the advisor, DGS, program, and/or the department. Application deadlines for these and other opportunities are up to the student to adhere. However, the DGS and department will also send out reminder email announcements at the appropriate times in the semester.

Note that student fees are not covered by the funding packages. Please visit the Student Financial Services and Cashiering (aka Bursar's Office) website for a breakdown of tuition and fees and payment options.

Graduate Research Day

Since 2015, QMMS has set aside one day in the spring semester to come together as a program and share our research with one another. All doctoral students who have not advanced to candidacy on the first day of the fall semester of the current academic year must present. Doctoral candidates are welcome to present, and master's students are encouraged to present (but are not required to do so).

Presentations are in conference-style format, approximately 12 minutes in length, and include a question and answer session to follow. Sessions of presentations will be organized around common content themes. There will be a chair for the session who will announce each presentation and facilitate questions that follow. There will also be an official timer that will keep presenters on track in terms of time allotted for each talk. Breakfast and lunch will be provided by the QMMS Program.

First-year students not yet involved in research are welcome to, for example, present a tutorial on a topic, a small literature review, or a data analysis used in an applied project. As students progress through their studies they will undoubtedly become involved in research projects that will become the basis for a Graduate Research Day presentation. Because of the timing of this event, many students have used these presentations as a "dry-run" for a presentation to be made at an upcoming national or international conference. That said, each participant who will be presenting is expected to practice their presentations several times so that the talk is polished and within the given time limits.

Graduation

Graduation is a very celebratory time—and we would hate to have you miss it because you did not apply for graduation in a timely manner. PAY ATTENTION! The Graduate School has forms that must be filled out and can be found, along with DEADLINES at:

https://gradschool.umd.edu/forms

And in case you were unaware, the College of Education has its own deadline to apply for graduation. You can find these forms and important deadlines at: https://education.umd.edu/student-resources/student-services/graduate-studies-student-services-office/important

Lastly, it is understood that it is the STUDENT'S RESPONSIBILITY to ensure that all forms are filled out and submitted on time. One way of helping is to start the "applying for graduation" process the semester before you graduate.

Institutional Research Board (IRB)

In the event that a dissertation—or any research—involves human participants, the student must submit the Application for Review of Research Using Human Subjects form to the Human Subjects Review Committee of the HDQM department. Students are responsible for completing and submitting the human subjects approval form to the Departmental Human Subjects Committee. The advisor will assist the student in preparing these materials. The IRB application process and forms are available online at: https://research.umd.edu/irbforms. Data may not be collected for the dissertation before human subjects approval has been granted both by the department and by the University Institutional Review Board.

The approved Application for Review of Research Using Human Subjects form is to be attached to the Certificate of Doctoral Research Committee and Dissertation Proposal form and submitted to the graduate program coordinator.

Leave of Absence

Graduate students are expected to maintain active status through continuous registration from the time they matriculate until they graduate. Students who are not able to maintain active status are strongly encouraged to consult with their advisor, DGS, program director, and relevant offices to determine whether requesting a leave of absence is the most appropriate course of action. Graduate students may request a *Leave of Absence* of up to 2 consecutive semesters for many reasons, including: Childbearing, Adoption, Illness, and Dependent Care (children, ill or injured partners, or aging parents). A leave of absence stops a student's Time to Degree clock. Students who do not have an approved leave of absence and are not continuously enrolled may experience negative consequences related to academic, visa, financial aid, and/or other student issues.

Monday Symposium in Measurement and Statistics (MSMS)

Each academic year, QMMS faculty arrange for speakers to present on topics of interest to the QMMS community. Presenters usually come from local research agencies and universities, but in recent years have also included QMMS faculty and students. The emphasis of this professional development opportunity is on advancements of quantitative methodological research. However, topics related to the application of psychometrics and statistical methodologies in research environments are also presented. MSMS presentations typically occur 3-4 times a semester—typically the first or second Monday of every month—and last for 1 hour. All QMMS graduate students are expected to attend, even those students working off-campus as the MSMS presentations are streamed live. There are opportunities for QMMS graduate students to participate in a luncheon with the speaker following their presentation.

Student Responsibilities

It is the student's responsibility to submit all paperwork and documentation of program requirements to the graduate program coordinator for placement in the student's departmental file. In addition, students must review the requirements and deadlines in the handbook and websites of the HDQM Department, the College of Education, and the Graduate School.

The graduate coordinaotr will provide a u-achieve audit. Students can also print an preliminary audit. Please note, students cannot replace or waive courses and requires the department to complete it. More information can be found here: https://registrar.umd.edu/uachieve-support

Time Limits

As much as we love having you around, the University of Maryland requires that a doctoral degree be completed within a **9-year time period**. Five years is given from the date of admission until the student is expected to advance to candidacy. The Graduate School allows four years to elapse between advancing to candidacy and the conferring of the degree. A minimum of six months must elapse between advancing to candidacy and conferring of the degree.

An extension of time to advance to candidacy or to complete the dissertation following advancement to candidacy may be granted if sufficient reason is presented. Request for Time Extension for Completion of Graduate Degree form to apply for a time extension is available online (see section on Graduate Student Forms below). The advisor, department, and college must approve time extensions. A maximum of one year may be approved, and may be requested twice. Without a time extension, failure to complete all requirements within the allotted time requires application for re-admission to the Graduate School. Under these conditions, program requirements existing at the time of readmission will apply.

Master's degree students have 5 years in which to complete their degree. Again, if more time is needed, a Request for Time Extension for Completion of Graduate Degree form to apply for a time extension must be submitted and approved.

STUDENT RESOURCES

Graduate Student Organizations

There are several graduate student organizations at the department, college, and university level. The HDQM graduate student organization provides opportunities for additional professional development, social gatherings, research, and other means of social support.

College of Education Student Services

https://education.umd.edu/student-resources

Travel Awards

There is an expectation that QMMS graduate students will be presenting their research at national and international conferences and meetings. Some of these include: the American Educational Research Association (AERA) conference, the National Council on Measurement in Education (NCME) annual conference, the International Meeting of the Psychometric Society (IMPS), the Modern Modeling Methods (MMM) conference, the Society for Research on Educational Effectiveness (SREE) conference, and the American Statistical Association (ASA) conference.

In general, attending conferences is expensive. There are typically two supplemental ways to defray the costs of attending such conferences: (1) applying for HDQM departmental funds ($500 per academic year July 1 – June 30); and (2) the applying through the Graduate School for travel funds. The latter usually comes in two forms, the Jacob K. Goldhaber Travel Grant and the International Conference Student Support Award (ICSSA). The former requires written application to the HDQM chair while the latter competitive pools of monies require a formal application and a letter written by the student's advisor. More information can be found on the Graduate School Travel Grants website at: https://gradschool.umd.edu/funding/student-fellowships-awards/graduate-school-travel-grants.

Other Awards, Fellowships, and Scholarship Opportunities

There are other funding opportunities at the college and university levels in the forms of fellowships to support dissertation work and general research. In the College of Education, students can apply for a Support Program for Advancing Research and Collaboration (SPARC) grant. This is a competitive grant program for the College of Education, with a special competition for Doctoral Graduate Students. The UMD campus also awards several fellowships and monies to support research. A listing of these can be at: https://gradschool.umd.edu/funding/student-fellowships-awards. Many of these fellowships and scholarships are not only competitive requiring a strategic application, but some must go through a filtering process at the department and college level as only a small number can be nominated. If you are interested, please check with your advisor, DGS, and/or program director well in advance of the due dates as application materials should not be thrown together at the last minute.

Campus Map

Don't know where you are going on campus? You can find out easily by bringing up the interactive UMD campus map at: https://maps.umd.edu/map/.

Dissertation & Thesis Formatting and Style Requirements

The University of Maryland has entered into an agreement with Proquest Information and Learning Services to accept theses and dissertations in Adobe PDF format via the web. The university accepts 99% of all dissertations and theses in electronic form. Saying that, your dissertation has a standard format which must be followed although the original document can be created in Word or LaTeX. See the following webpage for more details: https://gradschool.umd.edu/students/academic-progress/thesis-and-dissertation-filing.

LINKS TO DEPARTMENTAL, COLLEGE, AND UNIVERSITY RESOURCES

Course Descriptions

There are a plethora of QMMS graduate courses to take while in your degree program. You can find a small description of each course on the Graduate School catalog website at: https://academiccatalog.umd.edu/graduate/courses/QMMS/.

Course Syllabi

A repository of past QMMS syllabi can be located by navigating to: https://education.umd.edu/hdqm-course-archive.

College of Education Student Services/Resources

https://education.umd.edu/student-resources

Graduate Student Forms (Graduate School)

Throughout a graduate student's degree program there will be a number of forms to fill out—some will be required of the Graduate School and some will be required from the HDQM department or college. All Graduate School forms including, but not limited to, *leave of absence*, *time extension*, *dissertation forms*, *course waiver*, and *application to candidacy* can be found on the Graduate School website: https://gradschool.umd.edu/forms.

Graduate Student Forms (College of Education)

There are many forms that are needed internally by the department or the College of Education. These can be found at: https://education.umd.edu/student-resources/student-services/graduate-studies-student-services-office/graduate-studies-forms.

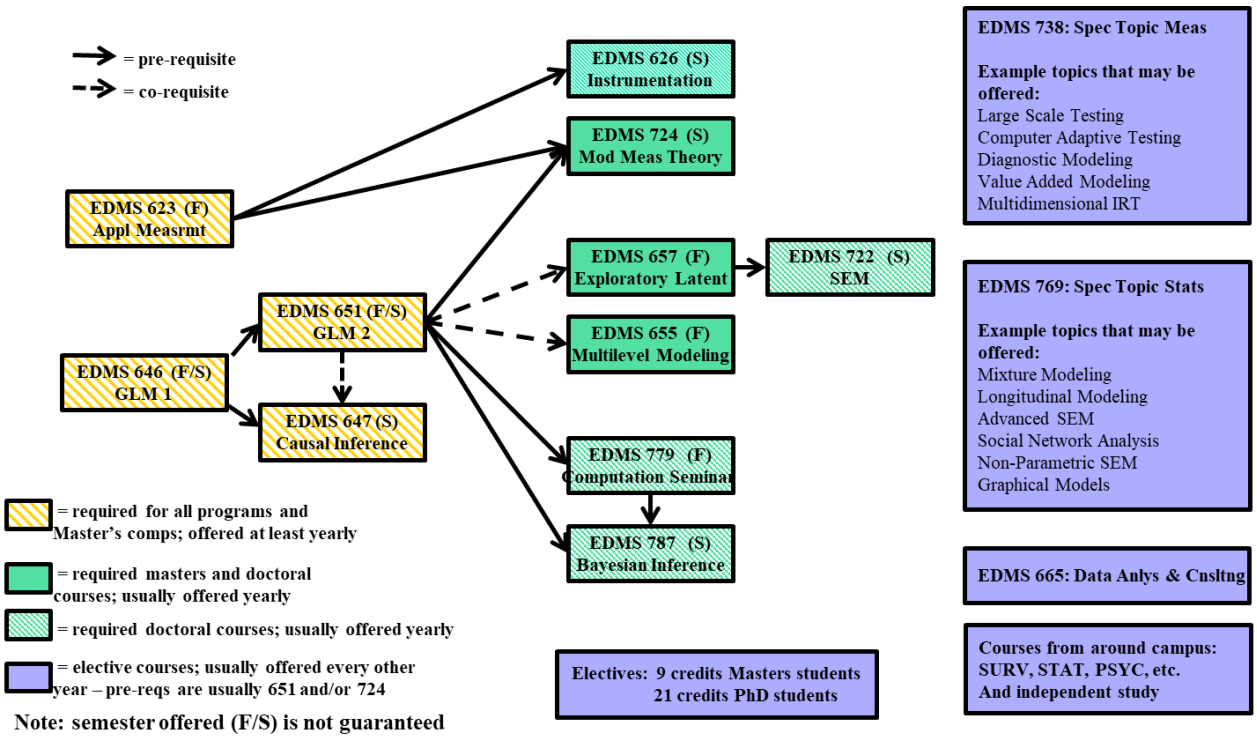
Programs and Policies

The Graduate School has many policies governing graduate students, degree programs, fellowships, graduate assistantships, tuition, fees and expenses, and so forth. You can find links to these policies at: https://academiccatalog.umd.edu/graduate/programs/.

Other Campus Resources

Other campus resources such as *student counseling, cultural services, legal, safety*, and *graduate student groups* can be found here: https://gradschool.umd.edu/campusresources.

APPENDIX A: SCHEMATIC OF QMMS COURSE OFFERINGS AND SEQUENCING



APPENDIX B: QMMS DEGREE PROGRAMS AT A GLANCE

Suggested Chronological Program Benchmarks and Activities

Year	Courses	Research Activities	Community Activities
1	Take at most 3 classes per semester (6 in all)	Share research in projects or classes in departmental settings Read articles for annotated bibliography in research area of interest Get to know faculty and colleagues—find out what research projects they are working on	Regularly attend MSMS seminars Regularly attend UPASS meetings Attend at least 1 methodological activity outside of the department each semester (talk on campus in related departments, local conferences, etc.) Participate in QMMS Graduate Research Day
2	Take at most 3 classes per semester (6 in all)	Share research in projects or classes in departmental settings Take part in an interdisciplinary project in CoE for independent study credit Initiate research project with faculty member or senior student Professional service by reading and reviewing manuscripts for colleagues and/or journals	Regularly attend MSMS seminars Regularly attend UPASS meetings Attend at least 1 methodological activity outside of the department each semester (talk on campus in related departments, local conferences, etc.) Participate in QMMS Graduate Research Day
3	Take at most 3—probably 2—classes per semester (these will now be mostly 700 level courses)—(4-6 in all)	Share research in projects or classes in departmental settings Take part in an interdisciplinary project in CoE for independent study credit Submit at least one proposal to a regional, national, or international conference Submit a paper for publication Professional service by reading and reviewing manuscripts for colleagues and/or journals	Regularly attend MSMS seminars Regularly attend U.PASS meetings Take over leadership role in U.PASS Attend at least 1 methodological activity outside of the department each semester (talk on campus in related departments, local conferences, etc.) Participate in QMMS Graduate Research Day
4	Dissertation proposal/dissertation defense	At least one summer internship usually done between years 3 and 4 or between years 4 and 5 Submit at least one proposal to a national or international conference Submit a paper for publication Professional service by reading and reviewing manuscripts for colleagues and/or journals	Regularly attend MSMS seminars Regularly attend UPASS meetings Take over leadership role in U.PASS Apply for leadership role in national organization like AERA/NCME Participate in QMMS Graduate Research Day
5	Dissertation proposal/dissertation defense	Submit at least one proposal to a national or international conference Submit a paper for publication Professional service by reading and reviewing manuscripts for colleagues and/or journals	

Prototypical Four-Year Course Sequence for QMMS Doctoral Students

Fall 1	**Spring 1**
GLM I (646)—core course which you may choose to exclude if material has already been taken	Modern Measurement Theory (724)
GLM II (651)—core course	**Causal Inference (647)—core course**
Applied Measurement (623)—core course	Instrumentation (626)
Elective 1 (Stat Theory/JPSM/Biostats)	
Fall 2	**Spring 2**
Introduction to Multilevel Modeling (655)	Structural Modeling (722)
Exploratory Latent and Composite Variable Methods (657)	Bayesian Inference and Analysis (787)
Simulation Design and Mathematical Foundations (779)	Advanced Quantitative Seminar (769 or 738) OR
	Independent Study (798) or Elective 2 (Stat Theory/JPSM/Biostats)
Exam 1: Master's Comprehensive/Ph.D. Preliminary Examination—in Fall 2 (retake at beginning of Spring 2, if necessary; leave program after year 2 if fail)	
Fall 3	**Spring 3**
Advanced Quantitative Seminar (769 or 738)	Advanced Quantitative Seminar (769 or 738)
Advanced Quantitative Seminar (769 or 738)	Advanced Quantitative Seminar (769 or 738)
Independent Study (798)	Independent Study (798)
Exam 2: Ph.D. Comprehensive Examination—in Spring 3 (retake at beginning of Fall 4, if necessary; leave program if fail)	
Fall 4	**Spring 4**
Dissertation Credits (889)	Dissertation Credits (889)
Dissertation Credits (889)	Dissertation Credits (889)
Dissertation Proposal Defense	**Dissertation Defense**

54 Required Credits (30 credits at a minimum) 12 Dissertation Research Credits

APPENDIX C: THE ADMISSIONS PROCESS

Students seeking to apply to either the QMMS Master's or Ph.D. Program must complete the online graduate application through the TerpEngage at https://amp.umd.edu/terpengage Graduate Admissions System, and upload a copy of an official transcript for each institution you attended. (A hard copy will be required upon enrollment). You can also find more information on the Graduate School website

View the admission requirements for program-specific information, including deadlines and additional materials that must be submitted with your application. It is important that your complete application be submitted by the program deadline. If you have international credentials or currently hold a visa, please visit the International Admissions section for more information. Note: once submitted, your application and associated materials become the property of the University of Maryland. These materials will not be returned to you, nor will the materials be forwarded to another institution. Please read the university's policy on collecting and using social security numbers.

STEP 2: Identify and Contact References for Letters of Recommendation

While completing other parts of your application, identify and contact references who will provide a strong letter of recommendation for you. Applicants should check with program requirements for the exact number of letters required. Recommenders should be the applicant's current or former professors, or other individuals who can speak to an applicant's academic talents, work ethic, and intellectual strengths. The online application will ask applicants to provide their references' names and email addresses. The references will then be contacted via email with instructions on how to electronically submit a letter of recommendation. This process can begin prior to submission of the application.

STEP 3: Submit Transcripts

Applicants are asked to upload a scanned version of their transcript(s) issued by each institution attended (in the original language, with literal English translation). Upon enrollment, you will need to have an official copy sent to the Graduate School by the institution. For a full description of the transcript requirements, please go to the FAQ section that describes Transcripts and Diplomas.

STEP 4: Submit Test Scores

The Graduate School will only accept official test scores sent directly by the testing agencies. When you request scores to be sent to the University of Maryland, College Park use the following institutional codes:

- GRE – 5814
- GMAT – SQT-N8-78
- TOEFL – 5814
- Praxis – 5814
- MAT – 4213

IELTS/PTE scores can also be sent electronically and by doing this, an institution code is not required. PTE test takers can send their score report to the University through their Pearson account. The University of Maryland downloads IELTS scores that have been transmitted to our e-download account. IELTS test takers should contact their IELTS test center directly to request electronic test scores be sent to the following IELTS e-download account:

University of Maryland - The Graduate School The Graduate School
2123 Lee Building College Park Maryland, 20742

Please note: The Graduate School will not accept paper IELTS test report forms.
You will **not be** required to submit TOEFL/IELTS/PTE scores if you have or will be awarded a degree from the United States, United Kingdom, Anglophone Africa, Anglophone Canada, Ireland, Australia, New Zealand, Singapore, and the Commonwealth Caribbean prior to enrolling in the University of Maryland. See a complete list of countries that satisfy this requirement.
You **will be** required to submit TOEFL/IELTS/PTE scores if you are a U.S. citizen or permanent resident with international credentials whose native language is not English and who does not hold a degree from an institution in the US or one of the areas listed above. Although they are U.S. citizens, applicants from Puerto Rico with degrees from Puerto Rican institutions will also be required to submit a TOEFL/IELTS/PTE score.

STEP 5: Pay Application Fee

You will be assessed a non-refundable $75 application processing fee for each program to which you apply. You are responsible for paying this fee whether or not you are offered admission or choose to enroll. You must pay your application fee online. Your application will not be processed until you pay your application fee and the payment is authorized.

STEP 6: See the After You Apply section

See link: https://gradschool.umd.edu/admissions/application-process/after-you-apply

Frequently Asked Questions https://gradschool.umd.edu/admissions/faqs

Funding Opportunities Throughout Campus

You can find and apply for available graduate assistantships at ejobs.umd.edu.
You do not need to apply for University Fellowships, as all applicants are automatically considered for these fellowships during the admissions process. These are extremely competitive awards and are not available to all admitted students.

Visit the **Office of Student Financial Aid's website** for information on other sources of funding and the Financial Literacy section of this website for guidance on managing your finances: https://www.financialaid.umd.edu/

Admission Requirements and Deadlines

Admission requirements can be accessed at: https://gradschool.umd.edu/admissions/admissions-requirements/education and can also be found on Education website by clicking on one of the QMMS-specific degree or certificate programs: Ph.D., M.S., B.A./M.S., or Certificate.

HDQM Department deadlines for admissions can be found at:

https://education.umd.edu/academics/departments/hdqm/academics/admissions-deadlines